

3762

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mark Schwartz

Title: RATE SMOOTHING CONTROL

Docket No.: 279.353US1

Filed: December 12, 2001

Examiner: George Robert Evanisko

Customer No.: 21186

Serial No.: 10/017,800

Due Date: N/A

Group Art Unit: 3762

Confirmation No.: 9663



# 5 IIPS  
10/24/03

Commissioner for Patents

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We are transmitting herewith the following attached items (as indicated with an "X"):

- A return postcard.  
 An Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (3 pgs.), and copies of 40 cited documents.

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

By: Suneel Arora

Atty: Suneel Arora

Reg. No. 42,267

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 10 day of October, 2003.

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Paula Sucky  
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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

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S/N 10/017800



PATENT

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Serial No.: 10/017,800  
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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicant respectfully requests that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicant requests that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicant with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Supplemental Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Supplemental Information Disclosure Statement considered.

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The Examiner is invited to contact the Applicant's Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

MARK SCHWARTZ

By his Representatives,

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Minneapolis, MN 55402  
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Date Oct. 15, 2003

By

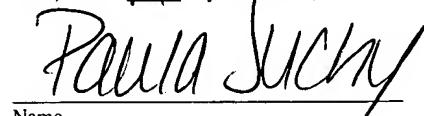


Suneel Arora

Reg. No. 42,267

Name

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Signature

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Sheet 1 of 3																															

### US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T <sup>2</sup>
	EP-0033418-	12/12/1980	Funke, H. D., et al.	A61N	1/36	
	EP-0360412	03/28/1990	Haluska, E. A.	A61N	1/365	
	EP-0401962	12/12/1990	Pless, B. D., et al.	A61N	1/368	
	EP-0597459	05/18/1994	Akhtar, M.	A61N	1/39	
	EP-0617980	10/05/1994	Murphy, A. J., et al.	A61N	1/368	
	EP-0748638	12/18/1996	Duncan, J. L.	A61N	1/368	
	WO-00/71200	11/30/2000	Krig, D. B., et al.	A61N	1/362	
	WO-00/71203	11/30/2000	Chen, V. T., et al.	A61N	1/39	
	WO-00/71202	11/30/2000	Kramer, A. P., et al.	A61N	1/362	
	WO-93/02746	02/18/1993	Olson, W. H.	A61N	1/368	
	WO-95/09029	04/06/1995	Weinberg, Lisa P., et al.	A61N		
	WO-97/11745	04/03/1997	Hess, M. F., et al.	A61N	1/362	
	WO-98/48891	11/05/1998	Krig, D. B., et al.	A61N	1/362	

### OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Metrix Model 3020 Implantable Atrial Defibrillator, Physician's Manual, InControl, Inc., Redmond, WA,(1998),pp. 4-24 - 4-27	
		"French CNH Equipment Approvals", Clinica, 417, p. 9, (September 5, 1990),3 pages	
		"Pacemaker System Guide for PULSAR MAX II; Multiprogrammable Pacemakers", Product brochure published by Guidant Corporation,(April 18, 1999),pp. 6 - 48 and 6 - 49	
		"Pacemaker System Guide for PULSAR MAX II; Multiprogrammable Pacemakers", Product brochure published by Guidant Corporation,(1999),pg 6-39 - 6-51	
		"Rate-Adaptive Devices Impact Pacemaker Market", Clinica, 467, p. 16, (September 11, 1991),6 pages	
		"Vitatron Medical Harmony Automatic Dual Chamber Pacemaker Product Information and Programming Guide", Product Brochure published by Vitatron Medical,(Date Unknown),22 pgs	
		AYERS, GREGORY M., et al., "Ventricular Proarrhythmic Effects of Ventricular Cycle Length and Shock Strength in a Sheep Model of Transvenous Atrial Defibrillation", Circulation, 89 (1), (Jan. 1994),pp. 413-422	
		BLOMMAERT, D. , et al., "Effective Prevention of Atrial Fibrillation by	

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DATE CONSIDERED

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <small>(Use as many sheets as necessary)</small>		Complete if Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/017800</td> </tr> <tr> <td>Filing Date</td> <td>December 12, 2001</td> </tr> <tr> <td>First Named Inventor</td> <td>Schwartz, Mark</td> </tr> <tr> <td>Group Art Unit</td> <td>3762</td> </tr> <tr> <td>Examiner Name</td> <td>Evanisko, George</td> </tr> </table>		Application Number	10/017800	Filing Date	December 12, 2001	First Named Inventor	Schwartz, Mark	Group Art Unit	3762	Examiner Name	Evanisko, George
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		Continuous Atrial Overdrive Pacing After Coronary Artery Bypass Surgery", JACC, Vol. 35, No. 6, (May 2000),pp. 1411- 1415	
		CAMPBELL, R. M., et al., "Atrial Overdrive Pacing for Conversion of Atrial Flutter in Children", Pediatrics, Vol. 75, No. 4, (April 1985),pp. 730 - 736	
		DUCKERS, H. J., et al., "Effective use of a novel rate-smoothing algorithm in atrial fibrillation by ventricular pacing", European Heart Journal, 18, (1997),pp. 1951-1955	
		FAHY, G. J., et al., "Pacing Strategies to Prevent Atrial Fibrillation", Atrial Fibrillation, 14 (4), (Nov. 1996),pp. 591-596	
		FROMER, M. , et al., "Algorithm for the Prevention of Ventricular Tachycardia Onset: The Prevent Study", The American Journal of Cardiology, 83 (5B), (Mar. 11, 1999),pp. 45D-47D	
		GARRIGUE, S. , et al., "Prevention of Atrial Arrhythmias during DDD Pacing by Atrial Overdrive", PACE, Vol. 21, (September 1998),pp. 1751 - 1759	
		HEUER, H. , et al., "Dynamic Dual-Chamber Overdrive Pacing with an Implantable Pacemaker System: A New Method for Terminating Slow Ventricular Tachycardia", Zeitschrift fur Kardiologie, 75, German Translation by the Ralph McElroy Translation Company, Austin, TX,(1986),5 p.	
		HEUER, H. , et al., "Dynamische Zweikammer-Overdrive-Stimulation mit einem implantierbaren Schrittmachersystem als neue Methode zur Beendigung Langsamer ventrikularer Tachykardien", Z Kardiol; 75, Includes English translation (5 pgs.),(1986),pp. 673 - 675	
		JENKINS, et al., "Diagnosis of Atrial Fibrillation Using Electrogram from Chronic Leads: Evaluation of Computer Algorithm", PACE, 11, (1988),pp. 622-631	
		JUNG, J. , et al., "Discrimination of Sinus Rhythm, Atrial Flutter, and Atrial Fibrillation Using Bipolar Endocardial Signals", Journal of Cardiovascular Electrophysiology, 9 (7), (July 1998),pp. 689-695	
<b>RECEIVED</b> <b>OCT 22 2003</b>		MEHRA, R. , et al., "Prevention of Atrial Fibrillation/Flutter by Pacing Techniques", Interventional Electrophysiology, Second Edition, Chapter 34, Futura Publishing Company, Inc.,(1996),pp. 521-540	
TECHNOLOGY CENTER R3700		MORRIS, et al., "Intracardiac Electrogram Transformation: Morphometric Implications for Implantable Devices", Journal of Electrocardiology, 29 Supplement, (1996),pp. 124-129	
		MOWER, MORTON , U.S. Patent Office Patent Application Information Retrieval (PAIR) search results for U.S. Patent Application Serial No. 10/214,474, filed on 8/8/02, entitled "METHOD AND APPARATUS FOR TREATING HEMODYNAMIC DISFUNCTION", 3	
		MURGATROYD, F. D., et al., "A New Pacing Algorithm for Overdrive Suppression of Atrial Fibrillation", Pace, Vol. 17., (November 1994, Part),pp. 1966 - 1973	
		SCHULLER, et al., "Far Field R-Wave Sensing - An Old Problem Repeating",	

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		PACE, 19, Part II, NASPE Abstract No. 264,(1996),p. 631	
		SEIM, G. , et al., "Classification of Atrial Flutter and Atrial Fibrillation Using an Atrial Dispersion Index (ADI)", Guidant CRM Therapy Research Peer Review Report Revision 2.0, (Jan. 6, 1999),27 p.	
		STEPHANY, et al., "Real-Time Estimation of Magnitude-Square Coherence for Use in Implantable Devices", IEEE Computers in Cardiology, (1992),pp. 375-378	
		SUTTON, R. , "Pacing in Atrial Arrhythmias", PACE, Vol. 13, (December 1990, Part),pp. 1823 - 1827	
		SWIRYN, S. , et al., "Detection of Atrial Fibrillation by Pacemakers and Antiarrhythmic Devices", Nonpharmacological Management of Atrial Fibrillation, Chapter 21, Futura Publishing Co, Inc. Armonk, NY,(1997),pp. 309-318	
		ZHU, D. W., "Electrophysiology, Pacing and Arrhythmia", Clin. Cardiol., Vol. 19, (September 1996),pp. 737 - 742	
		ZHU, D. , et al., "Pacing Therapy for Atrial Tachyarrhythmias", Clin. Cardiol. Vol. 19, (September 1996),pp. 737 - 742	

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